

*R2C1=C(R1)C(R)=NC2=C1C(=O)N3C(=O)C(=O)N3C4=CC=CC=C4

(1)

any of the foregoing aryl or heteroaryl groups or moieties being optionally substituted with one or more substituents selected from halo, hydroxy, mercapto, C₁₋₆ alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, C₁₋₆ alkoxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, halo(C₁₋₆)alkyl, halo(C₁₋₆)alkoxy, C₁₋₆ alkylthio, halo(C₁₋₆)alkylthio, hydroxy(C₁₋₆)alkyl, C₁₋₄alkoxy(C₁₋₆)alkyl, C₃₋₆ cycloalkyl, C₃₋₆ cycloalkyl(C₁₋₄)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR^{'''}R^{'''}, -NHCOR^{'''}, -NHCONR^{'''}R^{'''}, -CONR^{'''}R^{'''}, -SO₂R^{'''}, -OSO₂R^{'''}, -COR^{'''}, -CR^{'''}=NR^{'''} or -N=CR^{'''}R^{'''}, in which R^{'''} and R^{'''} are independently hydrogen, C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₁₋₄ alkoxy, halo(C₁₋₄)alkoxy, C₁₋₄ alkylthio, C₃₋₆ cycloalkyl, C₃₋₆ cycloalkyl(C₁₋₄)alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C₁₋₄ alkyl or C₁₋₄ alkoxy.

2. (Original): A compound according claim 1 wherein
 R^3 is C_{1-8} alkyl, halo(C_{1-8})alkyl, hydroxy(C_{1-8})alkyl, C_{1-4} alkoxy(C_{1-8})alkyl, C_{1-4} alkoxyhalo(C_{1-8})alkyl, tri(C_{1-4})alkylsilyl(C_{1-6})alkyl, C_{1-4} alkylcarbonyl(C_{1-8})alkyl, C_{1-4} alkylcarbonylhalo(C_{1-8})alkyl, phenyl(C_{1-4})alkyl, C_{2-8} alkenyl, halo(C_{2-8})alkenyl, C_{2-8} alkynyl, C_{3-8} cycloalkyl optionally substituted with chloro, fluoro or methyl, C_{3-8} cycloalkyl-(C_{1-4})alkyl, phenylamino, piperidino or morpholino, the phenyl ring of phenylalkyl or phenylamino being optionally substituted with one, two or three substituents selected from halo, C_{1-4} alkyl, halo(C_{1-4})alkyl, C_{1-4} alkoxy and halo(C_{1-4})alkoxy; and
 R^4 is H, C_{1-4} alkyl, halo(C_{1-4})alkyl or amino, or
 R^3 and R^4 together form a C_{3-7} alkylene or C_{3-7} alkenylene chain optionally substituted with methyl, or,
together with the nitrogen atom to which they are attached, R^3 and R^4 form a morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine *N*-(C_{1-4})alkyl (especially *N*-methyl) ring, in which the morpholine or piperazine rings are optionally substituted with methyl.
3. (Currently Amended): A compound according to claim 1 ~~or 2~~ claims wherein
 R^1 is phenyl optionally substituted with from one to five halogen atoms or with from one to three substituents selected from halo, C_{1-4} alkyl, halo(C_{1-4})alkyl, C_{1-4} alkoxy or halo(C_{1-4})-alkoxy, pyridyl optionally substituted with from one to four halogen atoms or with from one to three substituents selected from halo, C_{1-4} alkyl, halo(C_{1-4})alkyl, C_{1-4} alkoxy or halo(C_{1-4})-alkoxy, 2- or 3-thienyl optionally substituted with from one to three halogen atoms or with from one to three substituents selected from halo, C_{1-4} alkyl, halo(C_{1-4})alkyl, C_{1-4} alkoxy or halo(C_{1-4})alkoxy, or piperidino or morpholino both optionally substituted with one or two methyl groups.
4. (Original): A compound according to claim 3 wherein R^1 is 2,6-difluorophenyl, 2-fluoro-6-chlorophenyl, 2,5,6-trifluorophenyl, 2,4,6-trifluorophenyl, 2,6-difluoro-4-methoxyphenyl or pentafluorophenyl.
5. (Original): A compound according to claim 1 wherein W, X and Y are all CH and Z is N;
R is halo, R^1 is aryl, heteroaryl, morpholino, piperidino or pyrrolidino; R^2 is NR^3R^4 ;
 R^3 and R^4 are independently H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, aryl(C_{1-8})alkyl, C_{3-8} cycloalkyl, C_{3-8} cycloalkyl(C_{1-6})alkyl, heteroaryl, heteroaryl(C_{1-8})alkyl, NR^5R^6 , provided that

not both R^3 and R^4 are H or NR^5R^6 , or

R^3 and R^4 together form a C_{3-7} alkylene or C_{3-7} alkenylene chain optionally substituted with one or more C_{1-4} alkyl or C_{1-4} alkoxy groups, or,

together with the nitrogen atom to which they are attached, R^3 and R^4 form a morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine N -(C_{1-4})alkyl (especially N -methyl) ring; and

R^5 and R^6 are independently H, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, aryl, aryl(C_{1-8})alkyl, C_{3-8} cycloalkyl, C_{3-8} cycloalkyl(C_{1-8})alkyl, heteroaryl or heteroaryl(C_{1-8})alkyl;

any of the foregoing alkyl, alkenyl, alkynyl or cycloalkyl groups or moieties being optionally substituted with halogen, cyano, C_{1-6} alkoxy, C_{1-6} alkylcarbonyl, C_{1-6} alkoxy carbonyl, C_{1-6} haloalkoxy, C_{1-6} alkylthio, tri(C_{1-4})alkylsilyl, C_{1-6} alkylamino or C_{1-6} dialkylamino, any of the foregoing morpholine, thiomorpholine, piperidine, piperazine and pyrrolidine rings being optionally substituted with C_{1-4} alkyl (especially methyl), and any of the foregoing aryl, heteroaryl, aryloxy or heteroaryl groups being optionally substituted with one or more substituents selected from halo, hydroxy, mercapto, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} alkoxy, C_{2-6} alkenyloxy, C_{2-6} alkynyloxy, halo(C_{1-6})alkyl, halo(C_{1-6})alkoxy, C_{1-6} alkylthio, halo(C_{1-6})alkylthio, hydroxy(C_{1-6})alkyl, C_{1-4} alkoxy(C_{1-6})alkyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkyl(C_{1-4})alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, $-NR'''R''''$, $-NHCOR'''$, $-NHCONR'''R''''$, $-CONR'''R''''$, $-SO_2R'''$, $-OSO_2R'''$, $-COR'''$, $-CR'''=NR''''$ or $-N=CR'''R''''$, in which R''' and R'''' are independently hydrogen, C_{1-4} alkyl, halo(C_{1-4})alkyl, C_{1-4} alkoxy, halo(C_{1-4})alkoxy, C_{1-4} alkylthio, C_{3-6} cycloalkyl, C_{3-6} cycloalkyl(C_{1-4})alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C_{1-4} alkyl or C_{1-4} alkoxy.

6. (Original): A compound according to claim 1 wherein W, X and Y are all CH and Z is N; R is halo; R^1 is aryl, heteroaryl, morpholino, piperidino or pyrrolidino; R^2 is NR^3R^4 , R^3 is C_{1-4} alkyl, halo(C_{1-4})alkyl, C_{2-4} alkenyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkyl(C_{1-4})alkyl or phenylamino in which the phenyl ring is optionally substituted with one, two or three substituents selected from halo, C_{1-4} alkyl, halo(C_{1-4})alkyl, C_{1-4} alkoxy and halo(C_{1-4})alkoxy; and R^4 is H, C_{1-4} alkyl or amino, or R^3 and R^4 together form a C_{4-6} alkylene chain optionally substituted with C_{1-4} alkyl or C_{1-4} alkoxy, or together with the nitrogen atom to which they are attached, R^3 and R^4 form a morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine N -(C_{1-4})alkyl (especially N -methyl) ring;

any of the foregoing alkyl, alkenyl, alkynyl or cycloalkyl groups or moieties being optionally substituted with halogen, cyano, C₁₋₆ alkoxy, C₁₋₆alkylcarbonyl, C₁₋₆alkoxycarbonyl, C₁₋₆ haloalkoxy, C₁₋₆ alkylthio, tri(C₁₋₄)alkylsilyl, C₁₋₆ alkylamino or C₁₋₆dialkylamino, any of the foregoing morpholine, thiomorpholine, piperidine, piperazine and pyrrolidine rings being optionally substituted with C₁₋₄ alkyl (especially methyl), and any of the foregoing aryl or heteroaryl groups or moieties being optionally substituted with one or more substituents selected from halo, hydroxy, mercapto, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆ alkoxy, C₂₋₆ alkenyloxy, C₂₋₆alkynyloxy, halo(C₁₋₆)alkyl, halo(C₁₋₆)alkoxy, C₁₋₆ alkylthio, halo(C₁₋₆)alkylthio, hydroxy(C₁₋₆)alkyl, C₁₋₄ alkoxy(C₁₋₆)alkyl, C₃₋₆ cycloalkyl, C₃₋₆ cycloalkyl(C₁₋₄)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR^{'''}R^{'''}, -NHCOR^{'''}, -NHCONR^{'''}R^{'''}, -CONR^{'''}R^{'''}, -SO₂R^{'''}, -OSO₂R^{'''}, -COR^{'''}, -CR^{'''}=NR^{'''} or -N=CR^{'''}R^{'''}, in which R^{'''} and R^{'''} are independently hydrogen, C₁₋₄alkyl, halo(C₁₋₄)alkyl, C₁₋₄ alkoxy, halo(C₁₋₄)alkoxy, C₁₋₄ alkylthio, C₃₋₆ cycloalkyl, C₃₋₆ cycloalkyl(C₁₋₄)alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C₁₋₄ alkyl or C₁₋₄ alkoxy.

7. (Original): A compound according to claim 1 wherein one of W, X and Y are all CH and Z is N;

R is halo; R¹ is optionally substituted phenyl; R² is NR³R⁴,

R³ and R⁴ are independently H, C₁₋₈ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, aryl, aryl(C₁₋₈)alkyl, C₃₋₈ cycloalkyl, C₃₋₈ cycloalkyl(C₁₋₆)alkyl, heteroaryl, heteroaryl(C₁₋₈)alkyl, NR⁵R⁶, provided that not both R³ and R⁴ are H or NR⁵R⁶, or

R³ and R⁴ together form a C₃₋₇ alkylene or C₃₋₇ alkenylene chain optionally substituted with one or more C₁₋₄ alkyl or C₁₋₄ alkoxy groups, or,

together with the nitrogen atom to which they are attached, R³ and R⁴ form a morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine N-(C₁₋₄)alkyl (especially N-methyl) ring; and

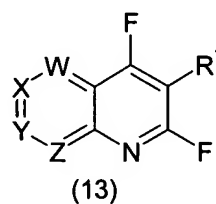
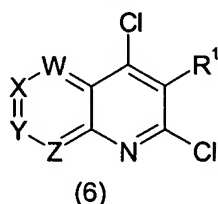
R⁵ and R⁶ are independently H, C₁₋₈ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, aryl, aryl(C₁₋₈)alkyl, C₃₋₈ cycloalkyl, C₃₋₈ cycloalkyl(C₁₋₆)alkyl, heteroaryl or heteroaryl(C₁₋₈)alkyl;

any of the foregoing alkyl, alkenyl, alkynyl or cycloalkyl groups or moieties being optionally substituted with halogen, cyano, C₁₋₆ alkoxy, C₁₋₆ alkylcarbonyl, C₁₋₆alkoxycarbonyl, C₁₋₆ haloalkoxy, C₁₋₆ alkylthio, tri(C₁₋₄)alkylsilyl, C₁₋₆ alkylamino or C₁₋₆dialkylamino; any of the foregoing morpholine, thiomorpholine, piperidine, piperazine and pyrrolidine rings being optionally substituted with C₁₋₄ alkyl (especially methyl), and any of the foregoing aryl or heteroaryl groups or moieties, including the phenyl group of R¹, being optionally substituted

with one or more substituents selected from halo, hydroxy, mercapto, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₁₋₆alkoxy, C₂₋₆ alkenyloxy, C₂₋₆ alkynyloxy, halo(C₁₋₆)alkyl, halo(C₁₋₆)alkoxy, C₁₋₆alkylthio, halo(C₁₋₆)alkylthio, hydroxy(C₁₋₆)alkyl, C₁₋₄ alkoxy(C₁₋₆)alkyl, C₃₋₆cycloalkyl, C₃₋₆ cycloalkyl(C₁₋₄)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR^{'''}R^{'''}, -NHCOR^{'''}, -NHCONR^{'''}R^{'''}, -CONR^{'''}R^{'''}, -SO₂R^{'''}, -OSO₂R^{'''}, -COR^{'''}, -CR^{'''}=NR^{'''} or -N=CR^{'''}R^{'''}, in which R^{'''} and R^{'''} are independently hydrogen, C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₁₋₄ alkoxy, halo(C₁₋₄)alkoxy, C₁₋₄ alkylthio, C₃₋₆ cycloalkyl, C₃₋₆ cycloalkyl(C₁₋₄)alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C₁₋₄alkyl or C₁₋₄ alkoxy.

8. (Original): A compound according to claim 1 wherein W, X and Y are all CH and Z is N; R is halo; R¹ is phenyl optionally substituted with from one to five halogen atoms or with from one to three substituents selected from halo, C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₁₋₄alkoxy or halo(C₁₋₄)-alkoxy, pyridyl optionally substituted with from one to four halogen atoms or with from one to three substituents selected from halo, C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₁₋₄alkoxy or halo(C₁₋₄)-alkoxy, 2- or 3-thienyl optionally substituted with from one to three halogen atoms or with from one to three substituents selected from halo, C₁₋₄alkyl, halo(C₁₋₄)alkyl, C₁₋₄ alkoxy or halo(C₁₋₄)alkoxy, or piperidino or morpholino both optionally substituted with one or two methyl groups; R² is NR³R⁴;
- R³ is C₁₋₈ alkyl, halo(C₁₋₈)alkyl, hydroxy(C₁₋₈)alkyl, C₁₋₄ alkoxy(C₁₋₈)alkyl, C₁₋₄ alkoxyhalo(C₁₋₈)alkyl, tri(C₁₋₄)alkylsilyl(C₁₋₆)alkyl, C₁₋₄ alkylcarbonyl(C₁₋₈)alkyl, C₁₋₄ alkylcarbonylhalo(C₁₋₈)alkyl, phenyl(C₁₋₄)alkyl, C₂₋₈ alkenyl, halo(C₂₋₈)alkenyl, C₂₋₈ alkynyl, C₃₋₈ cycloalkyl optionally substituted with chloro, fluoro or methyl, C₃₋₈ cycloalkyl(C₁₋₄)alkyl, phenylamino, piperidino or morpholino, the phenyl ring of phenylalkyl or phenylamino being optionally substituted with one, two or three substituents selected from halo, C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₁₋₄ alkoxy and halo(C₁₋₄)alkoxy; and
- R⁴ is H, C₁₋₄ alkyl, halo(C₁₋₄)alkyl or amino, or
- R³ and R⁴ together form a C₃₋₇ alkylene or C₃₋₇ alkenylene chain optionally substituted with methyl, or,
- together with the nitrogen atom to which they are attached, R³ and R⁴ form a morpholine, thiomorpholine, thiomorpholine S-oxide or thiomorpholine S-dioxide ring or a piperazine or piperazine N-(C₁₋₄)alkyl (especially N-methyl) ring, in which the morpholine or piperazine rings are optionally substituted with methyl.

9. (Original): A compound according to claim 1 wherein one of W, X and Y are all CH and Z is N;
 R is halo; R¹ is phenyl optionally substituted with from one to five halogen atoms or with from one to three substituents selected from halo, C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₁₋₄alkoxy or halo(C₁₋₄)alkoxy; R² is NR³R⁴; R³ is C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₂₋₄alkenyl, C₃₋₆ cycloalkyl, C₃₋₆ cycloalkyl(C₁₋₄)alkyl or phenylamino in which the phenyl ring is optionally substituted with one, two or three substituents selected from halo, C₁₋₄ alkyl, halo(C₁₋₄)alkyl, C₁₋₄ alkoxy and halo(C₁₋₄)alkoxy; and
 R⁴ is H, C₁₋₄ alkyl or amino, or R³ and R⁴ together form a C₄₋₆ alkylene chain optionally substituted with methyl, or, together with the nitrogen atom to which they are attached, R³ and R⁴ form a morpholine ring.
10. (Original): A process for preparing a compound of the general formula (1) according to claim 1 wherein one of R is chloro or fluoro and R² is NR³R⁴ and W, X, Y, Z, R¹, R³ and R⁴ are as defined in claim 1, which comprises reacting an amine of the general formula NR³R⁴ with a compound of the general formula (6) or (13):



wherein W, X, Y, Z and R¹ are as defined in claim 1.

11. (Original): A plant fungicidal composition comprising a fungicidally effective amount of a compound as defined in claim 1 and a suitable carrier or diluent therefor.
12. (Currently Amendment): A method of combating or controlling phytopathogenic fungi which comprises applying to a plant, to a seed of a plant, to the locus of the plant or seed or to soil or to any other plant growth medium, a fungicidally effective amount of a compound according to claim 1 ~~or a composition according to claim 12.~~